

Claims

- 1.. A circuit substrate assembly comprising a left-hand
(2) and a right-hand (2') circuit substrate identical
thereto, each including electrical and/or electronic
and/or electromechanical components (SW1, SW2, M1, M2,
S or SW1', SW2', M1', M2', S') and circuitry (3 or 3')
electrically connecting said components, whereby said
components (SW1, SW2, M1, M2 or SW1', SW2', M1', M2')
are positioned symmetrically mirrored on said left-
hand (2) and said right-hand (2') circuit substrate
respectively when said left-hand (2) and said right-
hand (2') circuit substrate are oriented along a
mirror plane (P) **wherein** the circuit functional
contact assignments (A-F) of at least one circuit
functional mirror-invariant component (S') on said
right-hand (1') circuit substrate materilize by a
translational shift perpendicular to said mirror plane
(P) from said circuit functional contact assignments
(A-F) of said corresponding circuit functional mirror-
invariant component (S') on said left-hand (2) circuit
substrate, and the circuitry on said left-hand circuit
substrate can be translated into the circuitry on said
right-hand circuit substrate by flipping it 180° about
an axis of rotation (g) located in said mirror plane
(P).
2. The circuit substrate assembly as set forth in claim 1
wherein said at least one circuit functional mirror-
invariant component is a plug (S,S') including plug
contacts (A to K) arranged in two rows juxtaposed in
parallel, the contact terminals (a to e) of said first
row of plug contacts (A to E) is arranged offset
relative to said contact terminals (f to k) of said
second row of plug contacts (F to K) by a distance (x)

parallel to the longitudinal axis of said plug, and circuitry sections (10 to 15) corresponding to said plug contacts are likewise arranged in two rows juxtaposed in parallel so that one pair each of said circuitry sections (10 and 11, 12 and 13, 14 and 15) runs under one pair each of plug contacts (A and F, B and G, C and H).

3. The circuit substrate assembly as set forth in claim 1 or claim 2 wherein said components on said left-hand circuit substrate are applied to one side of a first stamped matrix and said components on said right-hand circuit substrate are applied to the opposite side of a second stamped matrix identical to said first stamped matrix.

4. The circuit substrate assembly as set forth in claim 3 wherein contact pins and/or contact tags are each applied to said first stamped matrix and to said second stamped matrix so that they permit contacting said circuit functional mirror-invariant components on said left-hand circuit substrate (first stamped matrix) and on said right-hand circuit substrate (second stamped matrix).

5. The circuit substrate assembly as set forth in any of the claims 1 to 3 wherein said components on said left-hand circuit substrate are applied to said side of a conductor substrate provided single-sided with tracks, and said electromechanical components on said right-hand circuit substrate are applied to the other side of a second conductor substrate identical to said first conductor substrate and electrically connected to said tracks by through-holes through said conductor substrate.

6. The circuit substrate assembly as set forth in claim 5 wherein said conductor substrate is a rigid circuit board.
- 5 7. The circuit substrate assembly as set forth in claim 5 wherein said conductor substrate is a flexible circuit board.
- 10 8. The circuit substrate assembly as set forth in claim 5 wherein said conductor substrate is a flexible circuit film.

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